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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,513	06/20/2001	Zine-Eddine Boutaghou	S01.12-0672	5622

7590 07/16/2004  
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EXAMINER

MILLER, BRIAN E

ART UNIT	PAPER NUMBER
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2652

17

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/885,513

**Applicant(s)**

BOUTAGHOU ET AL.

**Examiner**

Brian E. Miller

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.  
4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.  
5) ☒ Claim(s) 10-20 is/are allowed.  
6) ☒ Claim(s) 1 and 3-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☒ Claim(s) 1, 3-9 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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Claims 1, 3-20 are pending with claims 6-7 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species.

### ***Drawings***

#### **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

##### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

##### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

##### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation of “imbalanced SLIP interface” is vague as it is not readily apparent what specific structure this encompasses. It is further not readily apparent how the so-called “SLIP interface” is structurally interconnected with the raised bearing surface, which renders the claim essentially. Additionally, it is not apparent where this “interface” is located on the slider. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. Claims 1, 3-5, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al (US 6,424,495). Kobayashi et al discloses a slider, as shown in FIGs. 2 & 6, including: (as per claims 1 & 9) a slider body 21 including a leading edge, a trailing edge and opposed sides, with the trailing edge including opposed first and second trailing edge portions (as shown in the figures); a bearing surface 30, 31 formed on the slider body; a slider integrated pad 35 on the first trailing edge portion elevated above the bearing surface and dynamically imbalanced (SLIP) relative to the second trailing edge portion to form a predicted tipped position (as shown in FIG. 2 and due to the placement of integrated pad 34) at the second trailing edge

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portion and the second trailing edge portion including a bearing surface interface at the predicted tipped position (in the vicinity of head 26); (as per claim 4) wherein the bearing surfaces include opposed first and second side rails and the imbalanced integrated pad is formed on the first side rail and the bearing surface interface is formed on the second side rail; (as per claim 5) wherein the leading edge includes opposed first and second leading edge portions which include slider integrated pads 33, 33 dynamically balanced relative to each other; (as per claim 8) wherein the slider body includes inner and outer side portions relative to the leading and trailing edges and the first trailing edge portion is on the inner side portion of the slider body and the second trailing edge portion is on the outer side portion of the slider body with the predicted tipped position on the outer side portion of the slider body, as shown in the figures.

With respect to the “textured surface”, Kobayashi et al further discloses (refer to FIGs. 6-7) the use of a laser to provide a textured surface on the bearing surface (see also col. 3, lines 40-42).

Taking this and the knowledge of a skilled artisan into consideration, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided such a textured surface to the aforementioned interface. The motivation would have been: providing texturing would have further relieved the slider/disc interface from stiction, as taught by Kobayashi et al and known in the art.

#### ***Allowable Subject Matter***

5. Claims 10-20 are allowable over the prior art of record.

6. Claim 10 is generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 18-20, directed to the species of FIGs. 10-13, are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. However, claims

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6-7, directed to species II & III remain withdrawn from consideration since they do not depend upon or otherwise include all the limitations of an allowed generic claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

### ***Response to Amendment/Arguments***

6. Applicant's arguments filed 4/16/04 with respect to the claims have been considered but are not fully persuasive.

A...Applicant asserts that Kobayashi does not anticipate claims 1, 4-5, 8-9, under 35 U.S.C § 102 since the limitation of claim 2, i.e., a textured surface, has been added to claims 1 & 9.

The Examiner has modified the 103 rejection to include these claims.

B...Applicant asserts that "Kobayashi discloses a rugged surface 51 is formed on the slider body not the transducer layer 22 and thus there is no basis to modify the head 14 of Kobayashi to include a rugged surface 51 on the transducer layer 22 along an outflow end of rail 30 having a shifted pad."

In response, the Examiner considers it would have been obvious to modify the slider of FIG. 2 to have included a rugged (textured) surface 52 (see FIG. 6) onto the rail 30, not layer 22 which applicant asserts. It is maintained that providing such a textured surface near this rail area would further prevent or reduce adsorption or the effect of meniscus (see col. 10, lines 1-35), which would flow naturally from Kobayashi.

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C...Claims 10-17, as amended, are considered to be allowable over the art of record. As claim 10 was considered generic, and is now allowed, claims 18-20 have been rejoined therewith, and are also allowed.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

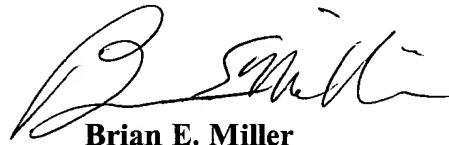
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Miller whose telephone number is (703) 308-2850. The examiner can normally be reached on M-TH 7:15am-4:45pm (and every other friday).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Brian E. Miller**  
**Primary Examiner**  
**Art Unit 2652**

bem  
July 13, 2004